Review Article

Psychosocial aspects of diabetes in pregnancy

J. B. Sharma, Rinchen Zangmo

Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, New Delhi, India

ABSTRACT

As treating physicians, we usually focus on the patient's medical condition, forgetting the impact of the illness on the psychosocial aspects of the patient's life. Patients with chronic medical illnesses usually suffer from a lot of psychosocial stress. Diabetes is one such medical condition where numerous studies focus on the physical and medical aspects, but fewer are concerned with the psychosocial experiences and needs of the patients. Transition to motherhood is a major life-changing event for all women. It brings in a big psychological impact on the woman who has to go through this transition with an added medical condition which can affect her pregnancy and also the health and well-being of the unborn child. In this article, we discuss the psychosocial issues faced by a diabetic woman going through the transition from pregnancy to motherhood.

Key words: Diabetes mellitus, gestational diabetes mellitus, psychosocial aspects

When it comes to providing health-care facilities, almost all centers in India and other developing countries focus mainly on the medical or surgical condition in question. Surprisingly, no or minimal attention is paid on the psychosocial factors that impact the overall health of the individual. Diabetes is one such medical condition where numerous studies focus on the physical and medical aspects, but fewer are concerned with the psychosocial experiences and needs of the patients. Diabetes mellitus is defined as carbohydrate disturbance characterized by hyperglycemia with peripheral insulin resistance or insulin deficiency. Incidence varies from 1% to 14% in the world depending on ethnicity, selection criteria, and the diagnostic tests performed.[1]

Transition to motherhood is a major life-changing event and also a common concept in developmental, stress, and adaptation theories.[2,3] Transitions at any point of time are usually associated with significant change, complex decisions, and increased stress, which can affect problem-solving and coping abilities of an individual.[4,5] When this transition is associated with an added medical condition, the psychological stress on the woman is huge.

In our country, most of the known diabetics belong to the affluent class. Most of them are educated, and being a chronic illness, they know their medical condition well. Many women are also aware of the fact that uncontrolled diabetes can lead to pregnancy-related complications. Hence, planning pregnancy in itself becomes a reason for a lot of stress to them. Consulting an obstetrician and an endocrinologist for preconception counseling may help the woman to optimize her health and her blood sugars to a level which is safe for the fetus. Many women miss this opportunity, and they would report only after pregnancy is confirmed. We have many women coming to us in the

Access this article online

Quick Response Code:

Website:
www.joshd.net

DOI:
10.4103/2321-0656.193993

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Sharma JB, Zangmo R. Psychosocial aspects of diabetes in pregnancy. J Soc Health Diabetes 2017;5:9-11.

Corresponding Author: Dr. J. B. Sharma, Department of Obstetrics and Gynaecology, All India Institute of Medical Sciences, 3082, New Delhi, India. E-mail: jbsharma2000@gmail.com

outpatient department in their late first trimester. Some have an HbA1c of over 12%. When the patients are counseled about the effect of increased HbA1c on the fetus, they become more concerned adding to the stress of their underlying medical condition. Some patients with very high HbA1c plan medical termination of pregnancy after consulting the geneticists and the obstetricians and understanding the risk of having a fetus with neural tube defects and other congenital malformations. Many of them wait for all the prenatal diagnostic tests including serum markers and ultrasound, and they proceed with pregnancy when the reports come normal although none of the tests are 100% sensitive. Whether the woman opts for termination of pregnancy or awaits all the investigations to be completed, she spends every minute of her life in a big psychological stress, the stress of losing her baby. Poor glycemic control of diabetes in itself is associated with increased incidence of miscarriage in the first trimester.[6] Due to a failed pregnancy, spontaneous miscarriage, or induced abortion in view of malformations, the woman is left in a profound grief. The spouse and relatives may overlook the situation, and the woman may not get adequate psychological and emotional supports.

According to Bridge *et al.*[2] and other authors[7,8] a big concern among diabetic women with pregnancy was the sense of losing control of their body and their diabetes.[2,7,8] According to King *et al.*, many women felt that they could no longer rely on their body's signs of recognizing hypoglycemic symptoms.[9] This made it difficult to manage fluctuating blood sugar levels.[9,10] To compensate for unpredictable blood sugar fluctuations, women monitored their sugar levels more frequently, which disrupted their daily routines and their sleep,[7,9,10] one more component contributing to the stress. Uncontrolled diabetes, whether gestational, type 1, or type 2 diabetes in pregnancy, is also associated with increased incidence of other obstetric complications such as full-term fetal demise. This complication should not arise with proper monitoring, biophysical profile, and timely management; despite all measures if such a mishap happens, additional psychological support and counseling should be provided to the grief stuck woman.

Various studies stated that pregnant women with type 1 diabetes experienced greater anxiety and depressive moods[11,12] and were more distressed[13] compared to pregnant women without preexisting diabetes. They also reported more intense pregnancy-related negative feelings and fewer positive emotions than pregnant women without diabetes.

During pregnancy, women with type 1 diabetes mellitus reported greater anxiety and more depressive and hostile moods compared to women with gestational diabetes.[12,14] Berg and Honkasalo stated that many women were afraid to sleep alone because of their fear for hypoglycemia.[10] They would prefer to rely on their partners or relatives for support in unexpected complications. Women with known diabetes before conception are more aware of their condition and hypoglycemic symptoms compared to women who are diagnosed with overt diabetes during pregnancy. Women with diabetes before pregnancy know their dietary schedule well; they are already adjusted and used to a diet with low glycemic index. Women experience cravings for different foods during pregnancy and those diagnosed with diabetes in pregnancy find it hard to kill their craving for sweets and other food items to be avoided in diabetes. Fighting with those cravings is not an easy task for a pregnant woman; still, she thinks of the fetus first and feels that one mistake committed by her may give rise to big mishaps. Ultimately, she is left with only a few options in diet, and this definitely adds up to the stress.

Health professionals have an important role in helping women achieve optimal pregnancy outcomes and also help them develop the confidence to manage their diabetes during their pregnancy and after delivery.[15] A review by Rasmussen *et al.* states that for some women, meeting their health-care professionals was more of a one-way communication, with the patient not having the opportunity to say much. Further, the aim of the health-care professional seemed to control the blood sugars only overlooking her emotional and psychological needs.[16] Women living in rural communities experienced additional difficulties accessing knowledgeable health professionals and services and moving on to some other place with advanced health-care facilities which added on to the cost and exacerbated their stress.[9,16] However, they also reviewed that women who were supported and acknowledged for their efforts by their medical team were highly satisfied.[9,16]

In an Indian set up, the role of the mother-in-law is immense; she is the one spending most of the time with the pregnant woman. A positive support from the mother-in-law helps neutralize many components of emotional upset. It is a good practice to involve the mother-in-law in the patient management. She should be explained in detail about the disease and its implications on the mother and the baby's health. Very few studies have examined the effect of psychosocial support in pregnant women with diabetes despite sufficient evidence that stress and psychological support affect health and pregnancy outcomes.[16] Overall management including following the diet schedule and timely medicine intake was more likely to be followed when social support was provided to the patient.[17]

Sparud-Lundin *et al*. studied the use of internet among diabetic patients with pregnancy, and they found that women found internet as a source of reliable information related to diabetes and pregnancy, interactive support, and social networking among similar patients.[18]

Many women residing in the urban areas in India too use Internet as a source of information regarding their medical condition. The web-based approach may be helpful in providing psychological support to the pregnant women who provided the information on the website was true and reliable.[18]

The phase after delivery is another big transition in a woman's life. In general, women experience combined feelings of joy and stress. Some women suffer from certain psychological conditions during this phase. Many women do not receive attention as the care is now diverted to the new member. Lack of support and care by the family members may lead to more of emotional and psychological upset. After discharge from the hospital, women feel a sense of disconnectedness from her health-care providers. Here comes the role of specific support from the family members. Rasmussen *et al*. stated that support from the partners was essential to enable women to manage daily life with a newborn baby and their diabetes.[16]

Social environment plays an integral role in women's perception of stress, their sense of control over their diabetes, and their transition to motherhood in general.[16]

Optimal psychosocial support should meet the needs, recognize a woman's knowledge and capabilities, and help her build a trustworthy relationship with the health-care professional. We, as a developing nation, have miles to go to reach that level of health system; however, higher centers are doing their bit to provide optimal psychosocial support along with treatment of the underlying illness.

To conclude, apart from health-care providers, the supportive role of spouse and in-laws, especially mother-in-law, in an Indian set up cannot be ignored, and this is of immense importance during all phases of this major transition of a woman's life, called pregnancy and childbirth.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Sharma JB. Textbook of Obstetrics. New Delhi: Avichal Publishing Co.; 2014.
2. Bridge W. Transitions. Making Sense of Life's Changes. London: Positive Paperbacks, Nicholas Brealey Publishing; 2001.
3. Bridge W. Managing Transitions. Making the Most of Change, People Skills for Professionals. London: Positive Paperbacks, Nicholas Brealey Publishing; 2002.
4. Rasmussen B, O'Connell B, Dunning P, Cox H. Young women with type 1 diabetes' management of turning points and transitions. Qual Health Res 2007;17:300-10.
5. Anderberson BJ. Families and chronic illness research: Targeting transitions and tools – Commentary on Trief *et al*. Fam Syst Health 2006;24:332-5.
6. Inkster ME, Fahey TP, Donnan PT, Leese GP, Mires GJ, Murphy DJ. Poor glycated haemoglobin control and adverse pregnancy outcomes in type 1 and type 2 diabetes mellitus: Systematic review of observational studies. BMC Pregnancy Childbirth 2006;6:30.
7. Lavender T, Platt MJ, Tsekiri E, Casson I, Byrom S, Baker L, *et al.* Women's perceptions of being pregnant and having pregestational diabetes. Midwifery 2010;26:589-95.
8. Langer N, Langer O. Pre-existing diabetics: Relationship between glycemic control and emotional status in pregnancy. J Matern Fetal Med 1998;7:257-63.
9. King R, Wellard S. Juggling type 1 diabetes and pregnancy in rural Australia. Midwifery 2009;25:126-33.
10. Berg M, Honkasalo ML. Pregnancy and diabetes – A hermeneutic phenomenological study of women's experiences. J Psychosom Obstet Gynaecol 2000;21:39-48.
11. Spirito A, Ruggiero L, Coustan D, McGarvey S, Bond A. Mood state of women with diabetes during pregnancy. J Reprod Infant Psychol 1992;10:29-38.
12. Langer N, Langer O. Comparison of pregnancy mood profiles in gestational diabetes and preexisting diabetes. Diabetes Educ 2000;26:667-72.
13. Moore ML, Meis P, Jeffries S, Ernest JM, Buerkle L, Swan M, *et al*. A comparison of emotional state and support in women at high and low risk for preterm birth, with diabetes in pregnancy, and in non-pregnant professional women. J Prenat Perinat Psychol Health 1991;6:109-27.
14. Ilias I, Papageorgiou C, Katsadoros K, Zapanti E, Anastasiou E. Preliminary report: Psychological assessment of Greek women with diabetes during pregnancy. Percept Mot Skills 2005;101:628-30.
15. Berg M, Sparud-Lundin C. Experiences of professional support during pregnancy and childbirth – A qualitative study of women with type 1 diabetes. BMC Pregnancy Childbirth 2009;9:27.
16. Rasmussen B, Hendrieckx C, Clarke B, Botti M, Dunning T, Jenkins A, *et al.* Psychosocial issues of women with type 1 diabetes transitioning to motherhood: A structured literature review. BMC Pregnancy Childbirth 2013;13:218.
17. Ruggiero L, Spirito A, Coustan D, McGarvey ST, Low KG. Self-reported compliance with diabetes self-management during pregnancy. Int J Psychiatry Med 1993;23:195-207.
18. Sparud-Lundin C, Ranerup A, Berg M. Internet use, needs and expectations of web-based information and communication in childbearing women with type 1 diabetes. BMC Med Inform Decis Mak 2011;11:49.